

PRL PC-FD1

Polycarbonate
Polymer Resources Ltd.

Message:

PRL PC-FD1 is a Polycarbonate (PC) product. It can be processed by injection molding and is available in North America. Typical application: Food Contact Applications.
Characteristics include:
RoHS Compliant
Food Contact Acceptable
Heat Resistant
Impact Resistant

General Information			
Features	Food Contact Acceptable		
	General Purpose		
	Low Flow		
	Medium Heat Resistance		
	Ultra High Impact Resistance		
Agency Ratings	FDA Unspecified Rating		
RoHS Compliance	RoHS Compliant		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	5.0 to 10	g/10 min	ASTM D1238
Molding Shrinkage			ASTM D955
Flow : 3.18 mm	0.50 to 0.70	%	
Across Flow : 3.18 mm	0.50 to 0.70	%	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			ASTM D785
M-Scale	70		
R-Scale	118		
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D638
Yield, 3.18 mm	62.1	MPa	
Break, 3.18 mm	72.4	MPa	
Tensile Elongation			ASTM D638
Yield, 3.18 mm	7.0	%	
Break, 3.18 mm	130	%	
Flexural Modulus (3.18 mm)	2310	MPa	ASTM D790
Flexural Strength (Break, 3.18 mm)	96.5	MPa	ASTM D790

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.18 mm)	910	J/m	ASTM D256
Gardner Impact (3.18 mm)	> 36.2	J	ASTM D3029
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed, 3.18 mm	138	°C	
1.8 MPa, Unannealed, 3.18 mm	132	°C	
Vicat Softening Temperature	154	°C	ASTM D1525 ¹
Optical	Nominal Value	Unit	Test Method
Transmittance (2540 μm)	88.0	%	ASTM D1003
Haze (2540 μm)	1.0	%	ASTM D1003
Injection	Nominal Value	Unit	
Drying Temperature	118 to 124	°C	
Drying Time	3.0 to 4.0	hr	
Drying Time, Maximum	8.0	hr	
Rear Temperature	288 to 310	°C	
Middle Temperature	299 to 321	°C	
Front Temperature	310 to 332	°C	
Processing (Melt) Temp	316 to 343	°C	
Mold Temperature	82.2 to 116	°C	
NOTE			

1. Rate B (120°C/h), Loading 2 (50 N)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

